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| 10/588,084      | 08/25/2007  | Masahiko Samukawa    | 128805              | 2031             |

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OLIFF & BERRIDGE, PLC  
P.O. BOX 320850  
ALEXANDRIA, VA 22320-4850

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| EXAMINER |
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JOLLEY, KIRSTEN

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

1715

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|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

11/04/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com  
jarmstrong@oliff.com

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/588,084 | <b>Applicant(s)</b><br>SAMUKAWA ET AL. |  |
|                              | <b>Examiner</b><br>Kirsten C. Jolley | <b>Art Unit</b><br>1715                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2010 and 09 August 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/19/10</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8, 13-14, and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 4, and 17-20, the “number of rotations of the object” is vague and indefinite because it is not clear what is meant by this phrase. The specification appears to disclose that this phrase refers to the object’s speed of rotation. However, the plain English meaning of the phrase refers to the actual number of rotations performed by the object. For purposes of examination, the phrase has been interpreted as the object's speed of rotation, since this is what is described in the specification. However, the Examiner suggests that Applicant change "number of rotations of the object" to --the rotational speed of the object-- in order to provide clarification and match the claim language with what is described in the specification.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackburn et al. (US 6,352,747).

Blackburn et al. discloses a method of coating a photochromic lens (abstract) comprising: dripping the coating liquid in a vicinity of an outer circumference on the coating surface of the lens; and thereafter dripping the coating liquid in a spiral shape toward a geometrical/optical center of the lens (col. 3, lines 35-39); wherein the nozzle is positioned so as to be vertically ascendable/descendable and horizontally moveable in a diameter direction (col. 8, lines 48-51). While the Examiner notes that Blackburn et al. does only specifically teaches a spiral coating step, it would have been obvious to a design engineer having ordinary skill in the art to have started the spiral shape by first coating around the entire periphery of the substrate, because otherwise part of the periphery would be left uncoated, which is undesirable in this uniform coating method.

As to claim 16, Blackburn et al. teaches a step of smoothing the applied coating liquid by spinning the lens in col. 3, lines 21-23. As to claims 17-19, while Blackburn et al. does not teach use of a plurality of smoothing steps, the Examiner notes that it is well known in the spin coating art to determine the optimum amount of spinning that results in smoothing and leveling of a coating through routine experimentation depending upon the particular coating material used, substrate used, length and speed of rotation, etc., in the absence of a showing of criticality.

As to claims 10-14, it is the Examiner's position that an engineer skilled in the art would have adjusted the positioning and movement of the nozzle, as well as rotational speed, based on the shape data of the lens, including its diameter and surface curve since Blackburn et al. teaches

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that its process may be used to coat lenses having a low or high base curvature (col. 7, lines 64-65), and the coating results would necessarily vary for different shapes/lens curvatures.

As to claim 15, the Examiner notes that it is well known in the spin coating art to adjust the pressure for dripping the coating liquid based on the temperature of the coating liquid so that flow rate is constant because the temperature of the coating liquid affects its viscosity, and the viscosity likewise then affects the pressure required to expel the drips from the nozzle.

***Allowable Subject Matter***

5. Claims 1-8 and 20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The prior art does not teach or fairly suggest a coating method of dripping and applying a coating liquid on a coating surface of an object comprising dripping the coating liquid in a ring shape in the vicinity of the outer circumference and then dripping the coating liquid in a spiral shape toward the center, wherein the object's rotational speed is set to be smaller during dripping in the ring shape than when dripping in the spiral shape. There is no teaching or suggestion in the prior art to vary the rotational speed of the substrate during application between the periphery and the spiral towards the center. Further, this is contrary to conventional knowledge which would decrease the rotational speed of the substrate as the nozzle approaches the substrate center, during spiral coating using constant nozzle speed, in order to maintain application of a constant amount of coating solution in the spiral.

***Response to Arguments***

6. The rejections over Adams and Magne set forth in the prior Office action have been withdrawn in response to Applicant's amendments to the claims. New claims 9-19 are rejected over the prior art of Blackburn et al. as discussed above.

7. Applicant's arguments filed August 2, 2010 have been fully considered but they are not persuasive. With respect to the Blackburn et al. reference, Applicant argues that part 1 of dispensing of coating material started at the edge does not show the ring shaped dripping step but simply shows that spiral coating is started from the edge of the substrate. While the Examiner notes that Blackburn et al. does only teach a spiral step, it would have been obvious to a design engineer having ordinary skill in the art to have started the spiral shape by first coating around the entire periphery of the substrate, because otherwise part of the periphery would be left uncoated, which is undesirable in this uniform coating method.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kirsten C Jolley/  
Primary Examiner, Art Unit 1715

kcj